

AD-A262 065



## DOCUMENTATION PAGE

Form Approved  
OMB No. 0704-0188

①

|   |   |  |                            |
|---|---|--|----------------------------|
| 2. REPORT DATE<br>June 1983   |   | 3. REPORT TYPE AND DATES COVERED<br>Final                |                            |
| 4. TITLE AND SUBTITLE<br>Ditch 19 Extension: A Cultural Resources Literature Search of the Ditch 14, Lateral A, Lateral 1 and Extended Reach of Ditch 19 in Dunklin and Stoddard Counties, Missouri |   | 5. FUNDING NUMBERS<br>DACW66-83-M-0530                   |                            |
| 6. AUTHOR(S)<br>Timothy C. Klinger  |   |  |                            |
| 7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)<br>Historic Preservation Associates<br>P.O. Box 1064<br>301 West Mountain Street<br>Fayetteville, Arkansas 72702                                 |   | 8. PERFORMING ORGANIZATION<br>REPORT NUMBER              |                            |
| 9. SPONSORING MONITORING AGENCY NAME(S) AND ADDRESS(ES)<br>Dept. of the Army<br>Memphis District Corps of Engineers<br>B-202 Clifford Davis Federal Bldg.<br>Memphis, TN 38103                      |   | 10. SPONSORING MONITORING<br>AGENCY REPORT NUMBER<br>130 |                            |
| 11. SUPPLEMENTARY NOTES   |   |  |                            |
| 12a. DISTRIBUTION / AVAILABILITY STATEMENT<br>Unlimited   |   | 12b. DISTRIBUTION CODE                                   |                            |
| <div style="border: 1px solid black; padding: 5px; text-align: center;">DISTRIBUTION STATEMENT A<br/>Approved for public release<br/>Distribution Unlimited</div>                                   |   |  |                            |
| 13. ABSTRACT (Maximum 200 words)<br>A background and literature search was conducted. No National Register cultural resources are currently on record within the project area.                      |   |  |                            |
| 14. SUBJECT TERMS   |   | 15. NUMBER OF PAGES<br>39                                |                            |
|   |   | 16. PRICE CODE   |                            |
| 17. SECURITY CLASSIFICATION<br>OF REPORT  | 18. SECURITY CLASSIFICATION<br>OF THIS PAGE | 19. SECURITY CLASSIFICATION<br>OF ABSTRACT               | 20. LIMITATION OF ABSTRACT |

DTIC  
NOTE  
MAR 16 1993  
B

# **DITCH 19 EXTENSION**

TIMOTHY C. KLINGER

**93-05414**



HISTORIC PRESERVATION ASSOCIATES REPORTS 83-6

JUNE 1983

98

2 10 000

# ***DITCH 19 EXTENSION***

TIMOTHY C. KLINGER



HISTORIC PRESERVATION ASSOCIATES REPORTS 83-6

JUNE 1983

## DITCH 19 EXTENSION

A Cultural Resources Literature Search of the Ditch 14,  
Lateral A, Lateral 1 and Extended Reach of Ditch 19  
in Dunklin and Stoddard Counties, Missouri

by

Timothy C. Klinger

Historic Preservation Associates  
P.O. Box 1064  
301 West Mountain Street  
Fayetteville, Arkansas 72702

|                           |                                     |
|---------------------------|-------------------------------------|
| <b>Accession For</b>      |                                     |
| NTIS GRAB                 | <input checked="" type="checkbox"/> |
| DTIC TAB                  | <input type="checkbox"/>            |
| Unannounced               | <input type="checkbox"/>            |
| Justification             |                                     |
| By                        |                                     |
| Distribution/             |                                     |
| <b>Availability Codes</b> |                                     |
| <b>Dist</b>               | <b>Avail and/or<br/>Special</b>     |
| A-1                       |                                     |

Report submitted to the Memphis District Corps of Engineers  
in accordance with Purchase Order DACW66-83-M-0530

## **ABSTRACT**

The investigations described in this report focus on a background and literature search for existing data relating to cultural resources which are, or may be, found within the corridors along Ditch 14, Lateral A, Lateral 1 and the Extended Reach of Ditch 19 in Dunklin and Stoddard Counties, Missouri. No National Register cultural resources are currently on record within the project limits.

## TABLE OF CONTENTS

|  |     |
|--|-----|
| Abstract   | i   |
| Table of Contents  | ii  |
| List of Tables   | iii |
| List of Figures  | iii |
| Background and Purpose of the Report                       | 1   |
| Project Location and Date of Investigation                 | 1   |
| Project Sponsor and Participants                           | 1   |
| Methods of Investigation                                   | 5   |
| Enviornmental Setting for the Ditch 19 Project Area        | 5   |
| General Cultural Background                                | 10  |
| Review of the GLO Data                                     | 10  |
| Review of the USGS Data                                    | 15  |
| Review of the DNR Data                                     | 15  |
| Review of the ASM Data                                     | 22  |
| Nature of Cultural Resources within the Proposed Corridors | 24  |
| References Cited   | 26  |
| Appendixes   | 30  |
| Project Scope of Work                                      | 31  |
| Records Check Document from the Missouri Archeological     |     |
| Survey Dated 7 February 1983                               | 37  |
| Project Participants                                       | 39  |

## LIST OF TABLES

|   |    |
|---|----|
| 1. Project Area Summaries   | 3  |
| 2. Characteristics of Soils Associated with the Project Corridors | 7  |
| 3. Prehistoric Cultural Sequence in the Ditch 19 Vicinity         | 11 |
| 4. Summary of Data from GLO maps                                  | 13 |
| 5. Summary of Data from USGS Quadrangle maps                      | 17 |
| 6. Search of Department of Natural Resources Records              | 18 |
| 7. Cultural Material Collected at Vernon Reaves Site (23DU168)    | 20 |
| 8. Search of Archeological Survey of Missouri Records             | 23 |

## LIST OF FIGURES

|  |    |
|--|----|
| 1. General location of the Ditch 19 extension project area               | 2  |
| 2. Project location in relation to Missouri watersheds                   | 4  |
| 3. Ditch 19 in its regional environmental setting                        | 6  |
| 4. Area as depicted in 1840, 1860 and 1861 by the General<br>Land Office | 14 |
| 5. Area as depicted in 1956 by the COE                                   | 16 |

## BACKGROUND AND PURPOSE OF THE REPORT

In January 1983, the Memphis District of the U.S. Army Corps of Engineers (COE) asked Historic Preservation Associates (HPA) to submit a proposal for a literature and records search of four ditch corridors in Dunklin and Stoddard counties, Missouri. On 14 January 1983, the HPA proposal was forwarded to the Memphis District. Purchase Order DACW66-83-M-0530 was issued 21 January 1983 and was received by HPA on 28 January 1983.

The purpose of this report is to document the results of our search of the relevant literature and records relating to the project area as required by the Scope of Work (Appendix A). The structure and content of the report adhere to the guidelines contained in The Management of Archeological Resources: The Airlie House Report (McGimsey and Davis 1977) and to those issued by the Missouri Office of Historic Preservation (1978).

### Project Location and Dates of Investigation

The project area is located in Dunklin and Stoddard counties, Missouri (Figure 1) in parts of T23N/R9E, T22N/R9E, T22N/R10E, T23N/R10E and T24N/R10E. Four separate but interrelated segments of the project are involved (Table 1) and include 13.9 miles of 300 ft wide ditch corridor (ca 505.45 ac). The project area is entirely within the Little River portion of the St. Francis watershed (Figure 2). The investigation was begun on 28 January 1983 and was completed with a draft report submitted in May 1983.

### Project Sponsor and Participants

The overall project sponsor is the Memphis District of the U.S. Army Corps of Engineers. The Contracting Officer for the program is Ms. Glenda W. Tackett and the archeological liason is Mr. Jimmy D. McNeil.

Historic Preservation Associates has carried out the work reported on here. Mr. Timothy C. Klinger served as Principal Investigator and wrote the report. Mr. Steven M. Imhoff and Mr. Scott A. Jones also assisted in report preparation (Appendix A).



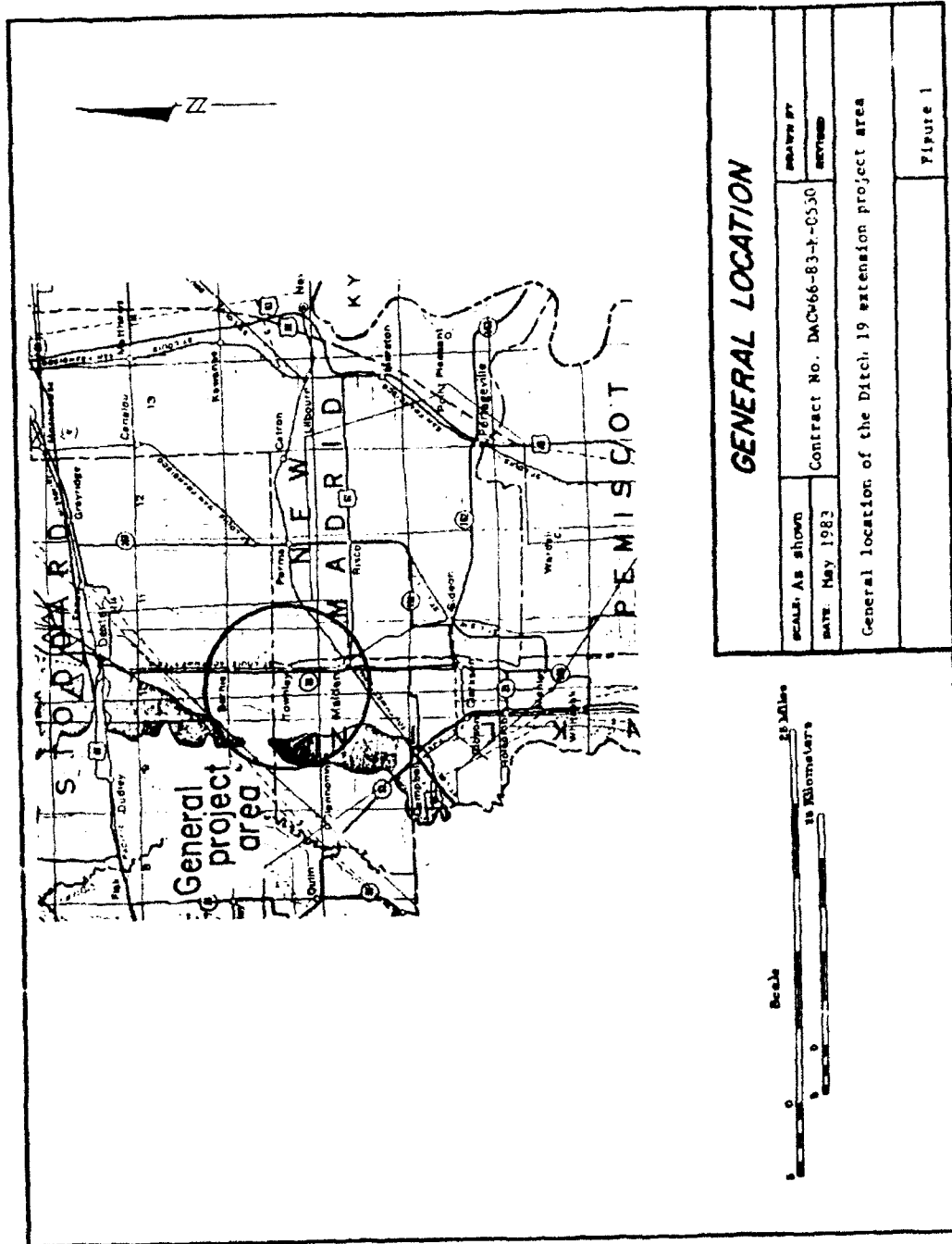
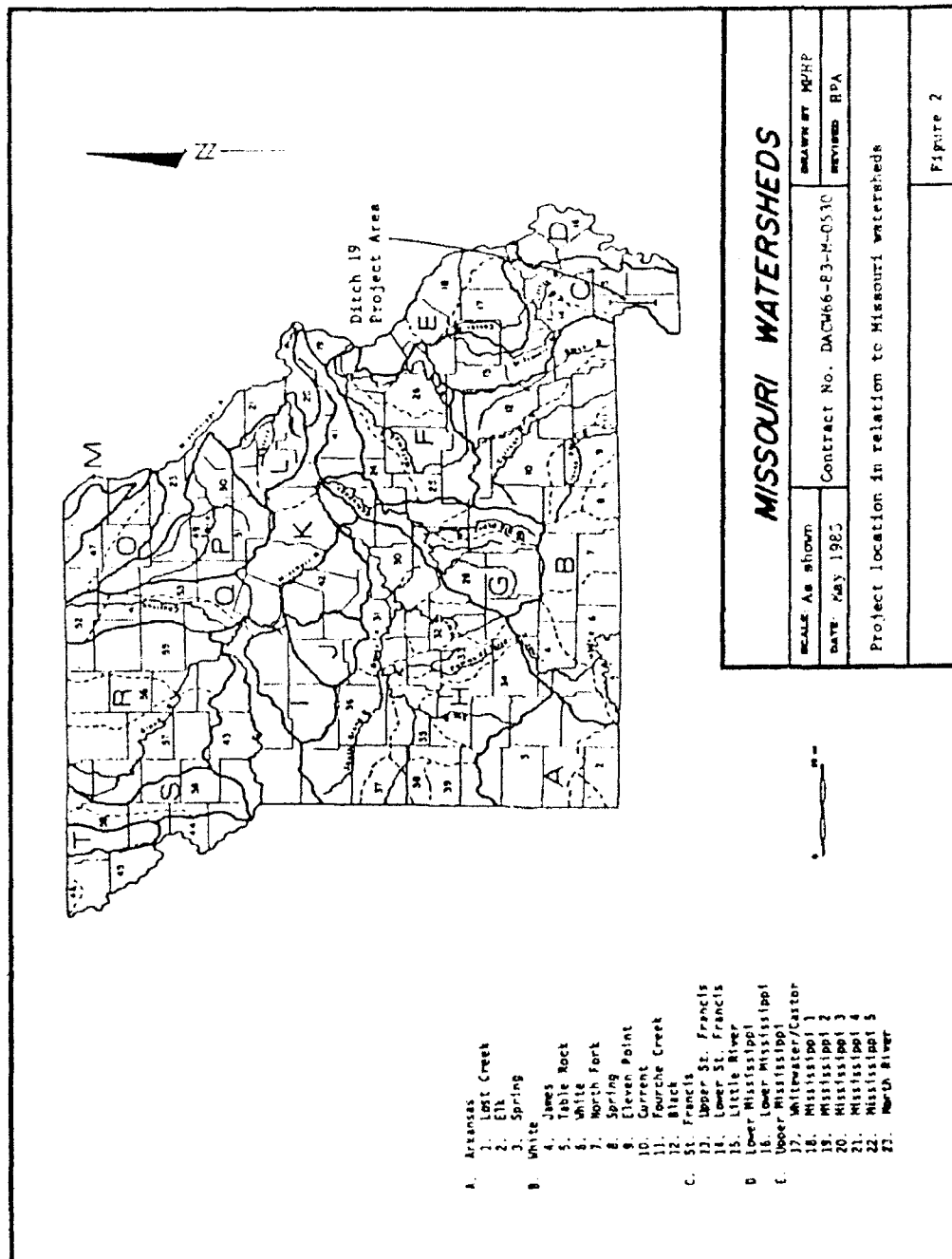


TABLE 1

## Project Area Summaries

| PROJECT NAME       | LENGTH<br>(Miles) | WIDTH<br>(Feet) | APPROXIMATE<br>ACREAGE |
|--------------------|-------------------|-----------------|------------------------|
| Ditch 19 Extension | 4.9               | 300*            | 178.18                 |
| Ditch 14           | 4.5               | 300             | 163.63                 |
| Lateral A          | 3.0               | 300             | 109.09                 |
| Lateral 1          | 1.5               | 300             | 54.55                  |
| Total              | 13.9              |                 | 505.45                 |

\*width of total corridor (i.e., 150 ft on each side of centerline)



# MISSOURI WATERSHEDS

|   |                               |               |
|---|-------------------------------|---------------|
| SCALE AS SHOWN                                      | CONTRACT NO. DMC466-E3-M-0510 | DRAWN BY MCHP |
| DATE: MAY 1985                                      | REVISED RPA                   |               |
| Project location in relation to Missouri watersheds |                               |               |
| Figure 2  |                               |               |

## Methods of Investigation

A background and literature search is defined in the Scope of Work (Appendix A:C-3.2) as a "comprehensive examination of existing literature and records for the purpose of inferring the potential presence and character of cultural resources in the study area". This definition summarizes the direction of the present project. In an attempt to accomplish this goal, we have reviewed all relevant published and unpublished cultural resources manuscripts. We have also contacted the State Historic Preservation Officer and obtained a summary of his relevant records. The Archaeological Survey of Missouri has likewise been consulted and a review of its records has been obtained (Appendix A).

In addition to these sources, relevant maps of the General Land Office have been reviewed as have those published by the U.S. Geological Survey.

## ENVIRONMENTAL SETTING FOR THE DITCH 19 PROJECT AREA

The Ditch 19 project area lies in what is archeologically known as the Central Mississippi Valley (Willey 1966:248). This subdivision of the Mississippi Valley is in turn composed of three basic geologic formations including the Tertiary and Old Uplands, the Dissected Older Alluvium and the Recent Alluvium (Fisk 1944:Figure 1).

The Tertiary and Older Uplands are represented in the valley by a number of erosional remnants of Tertiary age. The most important of these remnants with respect to the study area is Crowley's Ridge (Figure 3; Table 2).

Crowley's Ridge is a long narrow belt of upland extending from just south of Cape Girardeau, Missouri southward almost 402 km (250 mi) to Helena, Arkansas. These uplands are composed of sands and gravels covered with a thick mantle of loess consisting of eolian silt and clayey silt deposits (Saucier 1974). The eastern side of Crowley's Ridge that forms the western boundary of the project area is a well-defined steep bluff.

The Ridge bisects the Central Mississippi Valley creating the Eastern and the Western Lowlands. Phillips, Ford and Griffin (1951) describe Crowley's Ridge as an important physical and cultural divide. They note that the contrasting landscapes of Crowley's Ridge and the alluvial plains or lowlands on either side may provide important data concerning the interaction of human groups with their natural environment (Phillips, Ford and Griffin 1951:12).

In relation to the Ditch 19 study area, Crowley's Ridge was undoubtedly an important source of lithic materials, salt and pigment for prehistoric peoples (J. Price, Morrow and C. Price 1978:32). The streams that drain Crowley's Ridge also carry gravels into the project area, some of which may have been used by aboriginal groups.

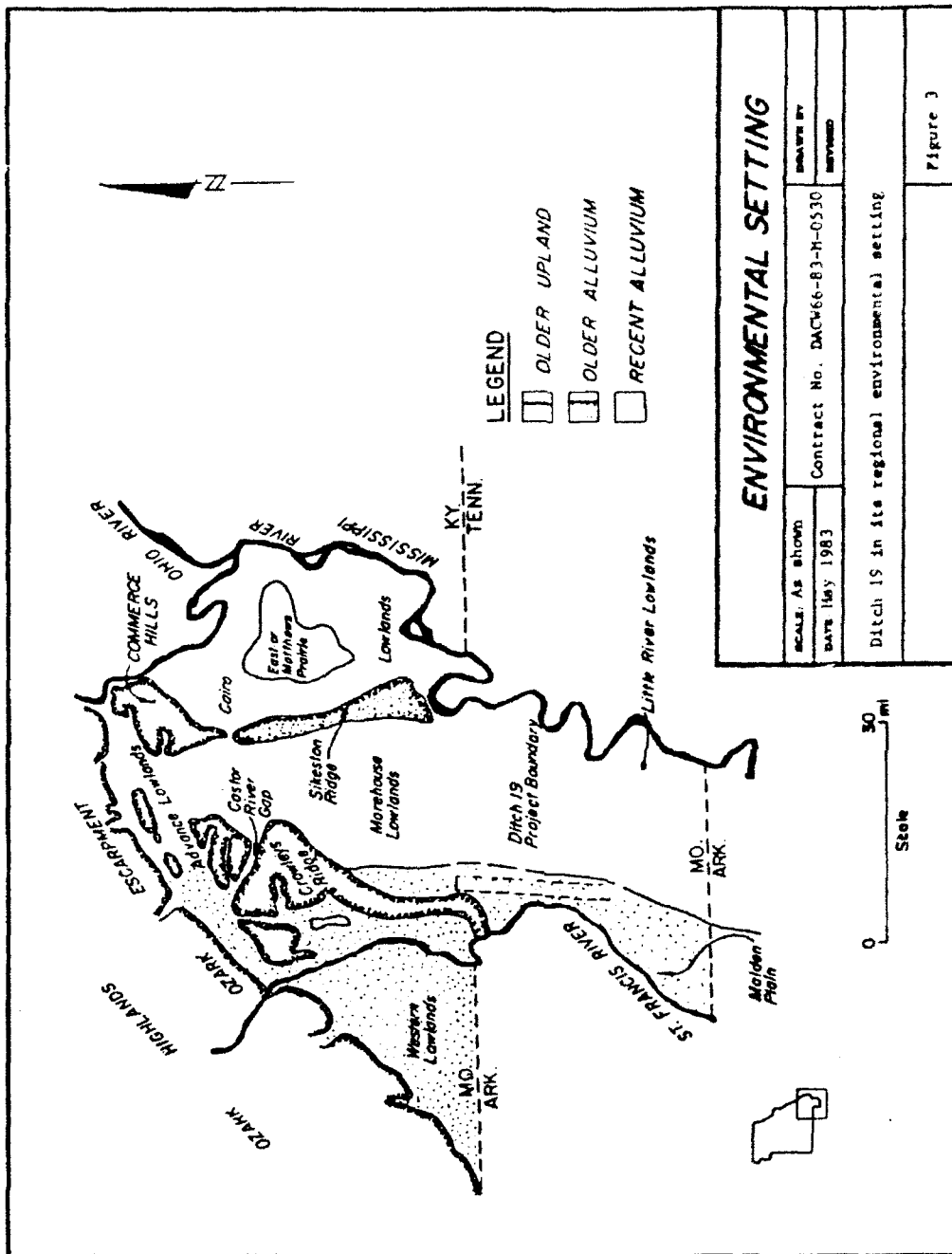


TABLE 2

## Characteristics of Soils Associated with the Project Corridors

| PROJECT/<br>SOIL TYPE                | TOPOGRAPHIC<br>SETTING                     | %<br>SLOPE | DRAINAGE         | FLOODING            |
|--------------------------------------|--|------------|------------------|---------------------|
| <u>Ditch 19 Extension 4.9 mi</u>     |  |            |                  |                     |
| Ca Cairo silty clay                  | channels & basins                          | 0-2        | poor             | common              |
| Gd Gideon loam                       | basins, low<br>natural levees              | 0-2        | poor             | occasional          |
| Ro Roellen silty clay                | channels & basins                          | 0-2        | poor             | occasional          |
| Sc Sharkey silty clay<br>loam        | broad flats,<br>backswamps                 | 0-2        | poor             | none to<br>common   |
| So Sikeston loam                     | channels & basins                          | 0-2        | poor             | rare to<br>frequent |
| Cv* Calhoun very fine<br>sandy loam  | terraces                                   | ---        | poor             | ---                 |
| Li* Lintonia fine<br>sandy loam      | broad terraces                             | ---        | poor             | ---                 |
| Lv* Lintonia very fine<br>sandy loam | terraces                                   | level well |                  | ---                 |
| Wa* Wabash clay loam                 | broad flats                                | ---        | poor             | ---                 |
| <u>Ditch 14 4.5 mi</u>               |  |            |                  |                     |
| Ca Cairo silty clay                  | channels & basins                          | 0-2        | poor             | common              |
| Gd Gideon loam                       | basins, low<br>natural levees              | 0-2        | poor             | occasional          |
| Ln Lilbourn fine<br>sandy loam       | low ridges,<br>terraces, natural<br>levees | 0-2        | somewhat<br>poor | rare                |
| Ma Malden fine sand                  | natural levees                             | 0-4        | excessive        | none                |
| So Sikeston loam                     | channels & basins                          | 0-2        | poor             | rare to<br>frequent |

TABLE 2 concluded

| PROJECT/<br>SOIL TYPE               | TOPOGRAPHIC<br>SETTING                     | %<br>SLOPE | DRAINAGE         | FLOODING            |
|-------------------------------------|--|------------|------------------|---------------------|
| <u>Lateral A 3.0 mi</u>             |  |            |                  |                     |
| Gd Gideon loam                      | basins, low<br>natural levees              | 0-2        | poor             | occasional          |
| Ln Lilbourn fine<br>sandy loam      | low ridges,<br>terraces,<br>natural levees | 0-2        | somewhat<br>poor | rare                |
| Sc Sharkey silty<br>clay loam       | broad flats,<br>backswamps                 | 0-2        | poor             | none to<br>common   |
| So Sikeston loam                    | channels & basins                          | 0-2        | poor             | rare to<br>frequent |
| Wd Wardell loam                     | low natural<br>levees                      | 0-2        | poor             | rare                |
| Cv* Calhoun very fine<br>sandy loam | terraces                                   | ---        | poor             | ---                 |
| Os* Olivier silt loam               | flat bottoms                               | ---        | poor             | ---                 |
| Wa* Wabash clay loam                | broad flats                                | ---        | poor             | ---                 |
| <u>Lateral 1 1.5 mi</u>             |  |            |                  |                     |
| Gd Gideon loam                      | basins, low<br>natural levees              | 0-2        | poor             | occasional          |
| So Sikeston loam                    | channels & basins                          | 0-2        | poor             | rare to<br>frequent |

\*data assembled from Sweet et al (1912)

The second major formation is the Dissected Older Alluvium. This includes Sikeston Ridge, the Malden Plain and the Western Lowlands. The Newer or Recent Alluvium is the third geologic formation in the Central Valley. Within the study area, the Newer Alluvium consists of the Eastern Lowlands of southeast Missouri which are in turn divided into the Cairo Lowland, Morehouse Lowland, Little River Lowland and Advance Lowland (Figure 3).

The Ditch 19 project area is situated in the Malden Plain. The Plain is bounded on the west by the present channel of the St. Francis River, on the east by the Little River Lowland and on the north and west by Crowley's Ridge. The Malden Plain is a portion of the abandoned alluvial fan of the Ohio River and is the only considerable area of older alluvium in the Eastern Lowland (Phillips, Ford and Griffin 1951:15). The major topographic features of the Malden Plain are braided stream terrace surfaces. These natural features have, however, been greatly altered by erosion, siltation and intensive agricultural activities.

Prior to levee construction and other flood control projects, portions of the study area were inundated by overflows of the Mississippi, St. Francis, Castor and Little Rivers. The Malden Plain was drained primarily by the St. Francis River before the construction of the twentieth century drainages.

The Malden Plain was once heavily forested by tree species including black walnut, cottonwood, willow, sassafras, hackberry, box elder, pawpaw, hickory and several varieties of oak before the extensive lumbering and railroad activities of the late nineteenth and early twentieth centuries (Gurley 1979:2). Studies by Shelford (1963) of flood plain plant communities and their associated fauna indicate that all large and medium size mammals that have existed in the region inhabited this area to some degree. The Malden Plain also supported a large population of reptiles, amphibians, fish and birds. Shelford (1963:91) comments that approximately 98% of these biotic communities have been obliterated by various factors including deforestation and ditching to drain the swamps. Today only a few small animal species inhabit the remaining stands of vegetation.

The Ditch 19 project area is situated in Dunklin and Stoddard counties, Missouri, and has long hot summers and rather cool winters. Precipitation is fairly heavy throughout the year with a slight peak in the winter (Gurley 1979:3). Severe thunderstorms and tornadoes are prevalent in this regions during the spring. In addition, the low-lying portions of the area are frequently inundated during the early part of the year. Average winter temperature is 40°F, average summer temperature is 79°F (Gurley 1979:3).

For more general discussions of regional environmental conditions see Fehon (1976:17-28), Ferguson (1979) and Call (1891).



## GENERAL CULTURAL BACKGROUND

This part of southeast Missouri has been populated over most of the past 12,000 years. During these times, the natural environment has supported a variety of groups, from bands of prehistoric hunters to present-day farmers. The same hillside or levee that once may have served as a garden for Woodland Indians 1,000 years ago now yields rich harvests of soybean and winter wheat. All of this points to a complex and not sufficiently understood cultural background for this region (Table 3).

Syntheses of the prehistoric sequence in the area have been presented by numerous authors including Price et al (1975, 1980), Price, Price and Harris (1976), Morse (1969), House (1975:29-34), Klinger (1978:13-19), Padgett and House (1977:9-10) and Morse (1980). All agree on the basic scheme of fluted projectile points associated with the Paleo-Indian Period, side and corner notched points associated with the Archaic Period, stemmed projectile points and grog or sand tempered ceramics associated with the Woodland Period and arrow points and shell tempered ceramics associated with the Mississippi Period. Similar historic summaries have also been published by C. Price (1980), Roberts (1976:154-188), Journey (1978:21-26), P. Morse (1980) and Padgett and House (1977:9-10).

## REVIEW OF THE GLO DATA

The project townships were surveyed by the General Land Office between 1840 and 1861. No improvements were recorded by the General Land Office within any of the four project corridors. With few exceptions there are no improvements such as houses or other buildings, cleared fields or roads or trails noted on the plats themselves (Table 4). The general setting as mapped by the contract surveyors suggest a near continuous swamp along all stretches of the project corridors (Figure 4). "Swamp" and "Cypress Swamp" are regular notations in the area.

Other natural features mapped during the survey include a "Rose brier prairie" in Secs. 28/33 T24N/R10E, a "Timber Prairie" along most of the western half of T23N/R10E, the eastern escarpment of Crowley's Ridge along the east edge of T23N/R9E and an unidentified "Prairie" in Secs. 16/21 T22N/R10E. Noted improvements are restricted to the area south and east of Ditch 14 in T22N/R10E. A "Road from Chalk bank ferry on St. Francis River to West Prairie" is mapped at least from T22N/R9E into T22N/R10E in Secs. 19, 20, 17, 16 and 15 where it connects with an unnamed north-south road. Cleared fields are also mapped along the roads and are identified in Secs. 17/20, 9/10 and 3/4/10 (Figure 4). No associated structures or names were recorded.

TABLE 3

## Prehistoric Cultural Sequence in the Ditch 19 Vicinity\*

| STAGE        | PERIOD        | PHASE                   | SELECTED ARTIFACT ASSOCIATIONS  |
|--------------|---------------|-------------------------|---|
| Paleo-Indian | pre-8000 BC   | ----                    | Fluted point forms, Clovis and Folsom-like, exotic cherts   |
| Archaic      |               |                         |   |
| Early        | 8000-5000 BC  | ----                    | Dalton, very little known   |
| Middle       | 5000-3000 BC  | ----                    | No information  |
| Late         | 3000-1800 BC  | ----                    | Little information  |
| Terminal     | Poverty Point | O'Bryan Ridge           | Large and small stemmed and notched projectile point forms; full-grooved ax; winged bannerstones; Poverty Point (baked clay) objects; Poverty Point-like cultural manifestation |
| Woodland     |               |                         |   |
| Early        | Tchula        | Pascola                 | Sand-tempered ceramics with pinching, punctations and incising; stemmed, contracting stemmed, notched projectile points   |
| Middle       | Marksville    | La Plant (Barnes Ridge) | Zones, dentate sand-tempered ceramics and other "Hopewellian-like" materials (poorly-understood)  |
| Late         | Baytown       | Dunklin                 | Sand-tempered Kennett Plain and Barnes Cordmarked ceramics  |
|              |               | Hoecake?                | Clay-tempered ceramics: Baytown Plain, Mulberry Creek Cordmarked, Larto Red-filmed  |
| Terminal     | Coles Creek   | ?                       | Dunklin Phase may have continued through Coles Creek Period   |

TABLE 3 concluded

| STAGE       | PERIOD                                | PHASE   | SELECTED ARTIFACT ASSOCIATIONS  |
|-------------|---------------------------------------|---|---|
| Mississippi | Developmental                         | Hayti or<br>early<br>Malden<br>Plain?               | Shell-tempered ceramics; Neeley's Ferry Plain and Varney Red-filmed; vessels include jars without appendages and with outflaring rims and steeply angled shoulders; hooded bottles, small arrow points  |
|             | Expansion                             | Cairo<br>Lowland                                    | Shell-tempered ceramics; Neeley's Ferry and Bell Plain; variety of decoration; small arrow points   |
|             |                                       | Pemiscot<br>Bayou                                   | Shell-tempered ceramics; Neeley's Ferry and Bell Plain; variety of decoration; small arrow points   |
|             | Late<br>Prehistoric/<br>Protohistoric | Armored<br>(Late<br>Nodena)(S.<br>Williams<br>1978) | Bell Plain, Neeley's Ferry Plain; various applique, incised, noded, painted and punctate types; bone "buttons"; willow leaf and triangular arrow points; snub-nosed scrapers; some historic trade goods |

\*Derived principally from S. Williams (1954), Phillips (1970) and J. Williams (1974)

TABLE 4

Summary of Data from GLO maps

| PROJECT<br>NAME       | TOWNSHIP | RANGE | SECTION | CULTURAL OR<br>ENVIRONMENTAL FEATURE |
|-----------------------|----------|-------|---------|--------------------------------------|
| Ditch 19<br>Extension | 24N      | 10E   | 29/30   | swamp                                |
|                       | 24N      | 10E   | 31/32   | swamp                                |
|                       | 23N      | 10E   | 5/6     | swamp                                |
|                       | 23N      | 10E   | 7/8     | swamp                                |
|                       | 23N      | 10E   | 18      | swamp                                |
|                       | 23N      | 10E   | 19      | swamp                                |
|                       | 23N      | 9E    | 24      | swamp                                |
|                       | 23N      | 9E    | 25      | swamp                                |
|                       | 23N      | 9E    | 36      | swamp                                |
|                       | 22N      | 9E    | 1       | ---                                  |
|                       | 22N      | 9E    | 12      | ---                                  |
|                       | 22N      | 9E    | 13      | ---                                  |
|                       | 22N      | 10E   | 18      | ---                                  |
|                       |          |       |         |                                      |
| Ditch 14              | 22N      | 10E   | 18      | swamp                                |
|                       | 22N      | 10E   | 17      | swamp                                |
|                       | 22N      | 10E   | 9       | swamp                                |
|                       | 22N      | 10E   | 4       | ---                                  |
| Lateral A             | 23N      | 9E    | 11/12   | swamp                                |
|                       | 23N      | 9E    | 13/14   | swamp                                |
|                       | 23N      | 9E    | 23/24   | swamp                                |
|                       | 23N      | 9E    | 25/26   | swamp                                |
|                       | 23N      | 9E    | 35/36   | swamp                                |
| Lateral 1             | 22N      | 9E    | 12      | ---                                  |
|                       | 22N      | 10E   | 7       | ---                                  |
|                       | 22N      | 10E   | 6       | ---                                  |

# GLO's

SCALE As shown

DRAWN BY

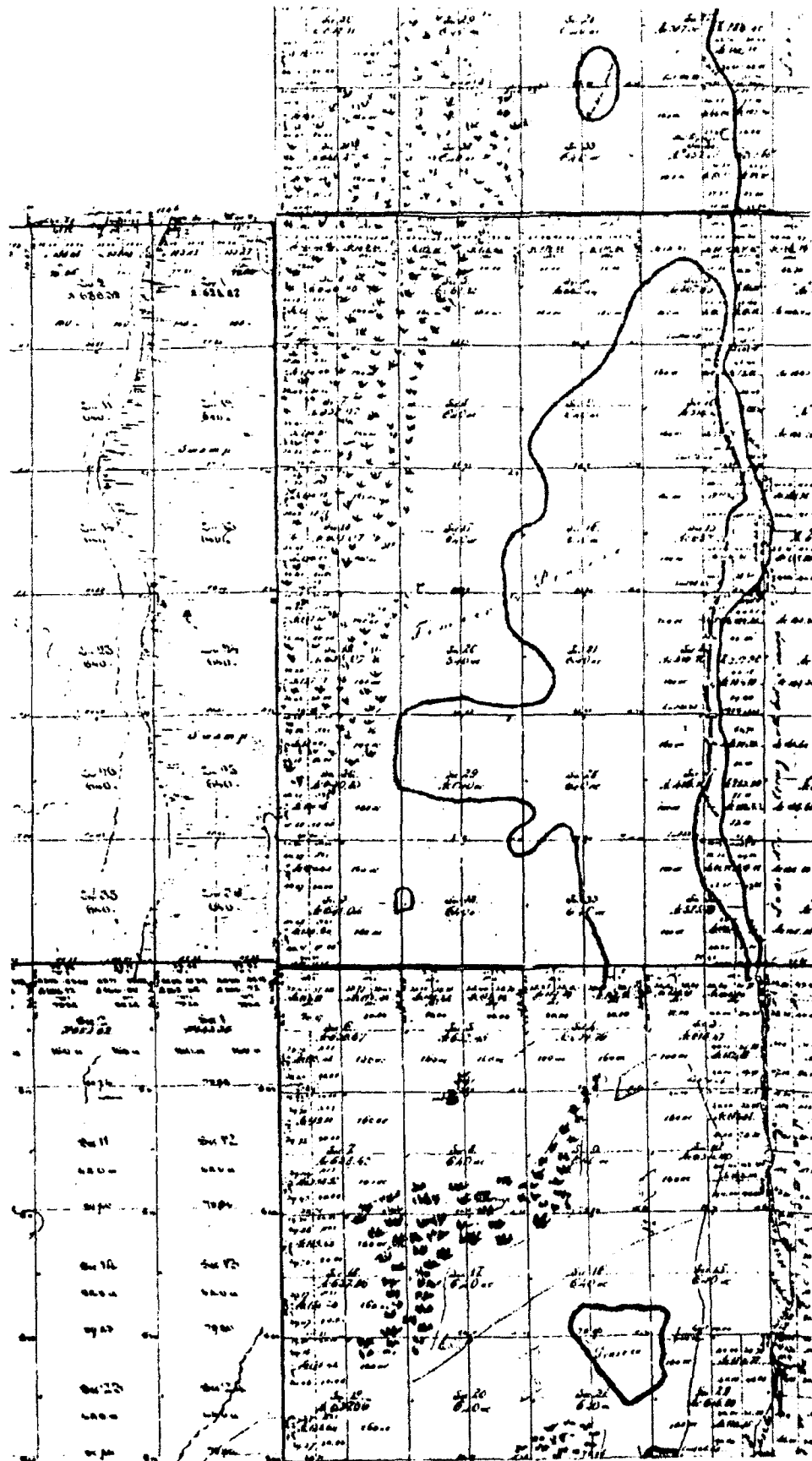
DATE May 1983

Contract No. DACW66-83-M-0530

REVISED

Area as depicted in 1840, 1860 and 1861 by the General Land Office

Figure 4



## REVIEW OF THE USGS DATA

The project area extends over two USGS 15' quadrangles published in 1956 (Malden and Valley Ridge) (Figure 5). In addition to the actual project locations, the maps also include identifications of then-existing structures which could be affected if they extend to within the proposed corridors.

Table 5 summarizes the USGS data. None of the structures identified on the maps are clearly within 150 ft of the existing ditch centerline. Eleven structures are mapped along the Ditch 19 Extension and all are either within 150 ft or on the edge of the corridor. Of these, four are east of the ditch and seven are situated to the west. The four structures located within or on the edge of the Ditch 14 corridor are all west of the centerline in Sec. 9 T22N/R10E. Three structures are situated along the eastern corridor of Lateral A and three more (2 on the east and 1 on the west) are located within or on the edge of the Lateral 1 right-of-way.

Although 21 structures are mapped adjacent to the project corridors it is not possible to identify which or how many of these are still occupied or otherwise in use. Based on the distribution of known sites and on a review of relevant map records it is likely that many more historic structures once stood within the project boundaries.

## REVIEW OF THE DNR DATA

On 28 January 1983, Jeep Helm of the Center for Archaeological Research, Southwest Missouri State University visited the Missouri Department of Natural Resources and reviewed for us the current files relating to our Dunklin and Stoddard county project areas. The results of her records search are summarized in Table 6.

The Department of Natural Resources has no recorded sites within the areas encompassed by the Lateral A or Lateral 1 corridors. Four sites are, however, on record at DNR in the area where the Ditch 14 and Ditch 19 Extension corridors meet at the north/south boundaries of T22N/R9E and R10E. The first site recorded at DNR was 23DU168 located in Sec. 18 T22N/R10E north of the Ditch 14 corridor and well outside of the proposed direct impact zone. Harris (1977) located 23DU168 (Vernon Reaves) while conducting a cultural resources survey for a proposed wastewater treatment plant for the City of Malden. Harris (1977:23-24) described the site as follows:

Two prehistoric occupations (Late Woodland and Mississippian) were present as well as a mid through end of Nineteenth century historic occupation(s). The site is located on a sandy rise which during the mid nineteenth century was located within a swampy area which extended to the northeast and southwest. Both the prehistoric and historic material was broadly scattered as a result of the pond construction and subsequent filling and land smoothing, making the

# USGS

SCALE AS SHOWN

DRAWN BY

DATE May 1983

Contract No. DACW66-83-M-0530

REVISED

Area as depicted in 1956 by the COE (Malden, Mo. and Valley Ridge Mo. quadrangles 15' series)

Figure 5

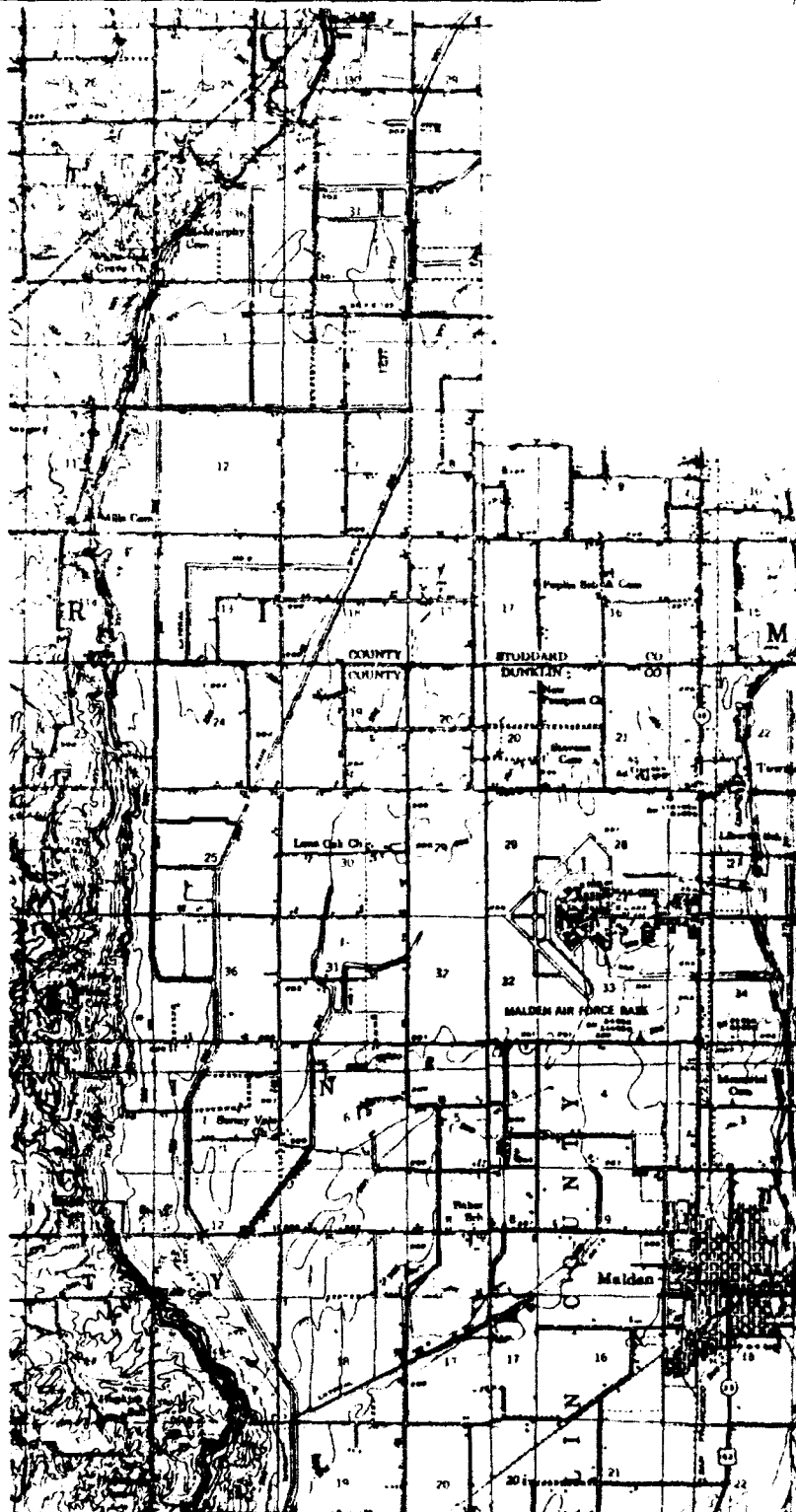


TABLE 5

Summary of Data from USGS Quadrangle maps

| PROJECT NAME | TOWNSHIP | RANGE | SECTION | SIDE OF PROJECT | NO. OF STRUCTURES | RELATIONSHIP TO PROJECT |
|--------------|----------|-------|---------|-----------------|-------------------|-------------------------|
| Ditch 19     | 24N      | 10E   | 29/30   | ----            |                   | ----                    |
| Extension    | 24N      | 10E   | 31/32   | west            | 2                 | W/in 150' or edge       |
|              | 23N      | 10E   | 5/6     | west            | 3                 | W/in 150' or edge       |
|              | 23N      | 10E   | 7/8     | ----            |                   | ----                    |
|              | 23N      | 10E   | 18      | ----            |                   | ----                    |
|              | 23N      | 10E   | 19      | ----            |                   | ----                    |
|              | 23N      | 9E    | 24      | ----            |                   | ----                    |
|              | 23N      | 9E    | 25      | west            | 1                 | W/in 150' or edge       |
|              | 23N      | 9E    | 36      | ----            |                   | ----                    |
|              | 22N      | 9E    | 1       | east            | 1                 | W/in 150' or edge       |
|              | 22N      | 9E    | 12      | east/west       | 1/1               | W/in 150' or edge       |
|              | 22N      | 9E    | 13      | east            | 2                 | W/in 150' or edge       |
|              | 22N      | 10E   | 18      | ----            |                   | ----                    |
| Ditch 14     | 22N      | 10E   | 18      | ----            |                   | ----                    |
|              | 22N      | 10E   | 17      | ----            |                   | ----                    |
|              | 22N      | 10E   | 9       | west            | 4                 | W/in 150' or edge       |
|              | 22N      | 10E   | 4       | ----            |                   | ----                    |
| Lateral A    | 23N      | 9E    | 11/12   | ----            |                   | ----                    |
|              | 23N      | 9E    | 13/14   | east            | 2                 | W/in 150' or edge       |
|              | 23N      | 9E    | 23/24   | ----            |                   | ----                    |
|              | 23N      | 9E    | 25/26   | ----            |                   | ----                    |
|              | 23N      | 9E    | 35/36   | east            | 1                 | W/in 150' or edge       |
| Lateral 1    | 22N      | 9E    | 12      | east            | 2                 | W/in 150' or edge       |
|              | 22N      | 10E   | 7       | west            | 1                 | W/in 150' or edge       |
|              | 22N      | 10E   | 6       | ----            |                   | ----                    |



TABLE 6

Search of Department of Natural Resources Records  
(as of 28 January 1983)

| PROJECT<br>NAME       | TOWNSHIP | RANGE | SECTION | RESULTS          |
|-----------------------|----------|-------|---------|------------------|
| Ditch 19<br>Extension | 24N      | 10E   | 29/30   | negative         |
|                       | 24N      | 10E   | 31/32   | negative         |
|                       | 23N      | 10E   | 5/6     | negative         |
|                       | 23N      | 10E   | 7/8     | negative         |
|                       | 23N      | 10E   | 18      | negative         |
|                       | 23N      | 10E   | 19      | negative         |
|                       | 23N      | 9E    | 24      | negative         |
|                       | 23N      | 9E    | 25      | negative         |
|                       | 23N      | 9E    | 36      | negative         |
|                       | 22N      | 9E    | 1       | negative         |
|                       | 22N      | 9E    | 12      | 23DU241          |
|                       | 22N      | 9E    | 13      | negative         |
|                       | 22N      | 10E   | 18      | 23DU263, 23DU243 |
|                       |          |       |         |                  |
| Ditch 14              | 22N      | 10E   | 18      | 23DU263, 23DU243 |
|                       | 22N      | 10E   | 17      | 23DU168          |
|                       | 22N      | 10E   | 9       | negative         |
|                       | 22N      | 10E   | 4       | negative         |
| Lateral A             | 23N      | 9E    | 11/12   | negative         |
|                       | 23N      | 9E    | 13/14   | negative         |
|                       | 23N      | 9E    | 23/24   | negative         |
|                       | 23N      | 9E    | 25/26   | negative         |
|                       | 23N      | 9E    | 35/36   | negative         |
| Lateral 1             | 22N      | 9E    | 12      | negative         |
|                       | 22N      | 10E   | 7       | negative         |
|                       | 22N      | 10E   | 6       | negative         |

delineation of the original limits of the various occupation areas difficult to determine. Most of the cultural material of both the prehistoric and historic periods was observed in the eroded depressions associated with the fish pond due to the lack of vegetation and exposure of the artifacts by wind deflation.

The prehistoric activities represented at Vernon Reaves represent at least Late Woodland (based on the presence of sand tempered Barnes Plain pottery (variously called "Barris" (1977:24) and "Berres" (1977:36) in the Harris report) and Mississippi Period occupations (inferred from the 3 Neeley's Ferry Plain sherds found on the surface of the site). (See Table 7 for a complete listing of the recovered assemblages).

Pre Civil War historic activities are represented by a number of ceramic fragments including pieces of a salt glazed crock, hand painted "gaudy dutch", spongestick stamped, and green bottle glass (Harris 1977:25-26) (Table 7). The late 19th century to early 20th century occupation at the site is evidenced by ironstone sherds with registered marks of 1878 and 1896 (Harris 1977:26).

Even though Vernon Reaves is situated outside the project corridors it is interesting for our purposes from two perspectives. To begin with, the evidence of a mid 19th century occupation is consistent with the identification of general improvements in the area by the General Land office when it surveyed the area in 1860. Historic occupations were clearly established near the ditch corridors by at least that time. Two problems emerge, however, with regard to the GLO plat. The actual location of 23DU168 is well within the area mapped as a cypress swamp (i.e., Secs. 8 and 17). Further, no improvement was noted by the surveyors anywhere near the site's location even though the section line presumably walked is only a short distance away (a fact pointed out by Harris 1977:27). All of this simply further substantiates the need to cautiously use the information collected by the GLO when drawing conclusions regarding the nature and number of resources present in an area.

23DU241 was recorded during a 1978 survey of Ditch 19 by Iroquois Research Institute (LeeDecker et al 1979). Apparently located outside the current project corridor, the site reflects both historic and prehistoric activities. The sparse historic artifacts (LeeDecker et al 1979:90-91) are late and no evidence of an associated structure was noted. Both Late Woodland Barnes and some period of Mississippi activities apparently took place at 23DU241. Barnes Plain, Barnes Cord Marked and Barnes Fabric Impressed sherds were found together with Neeley's Ferry Plain sherds in the excavated 1 m x 1 m test unit. This excavation was supplemented by a series of 32 shovel tests and a surface collection of 12,500 m<sup>2</sup> (LeeDecker et al 1979:89). In addition to the pottery, the lithic assemblage suggests a possible Paleo Indian or Early Archaic, Late Archaic, Middle Woodland and both Early and Middle Mississippi occupations (LeeDecker et al 1979:95). 23DU241 was argued to meet National Register criteria for significance by Iroquois and various mitigation alternatives were proposed (LeeDecker et al 1979:107-113). For a complete discussion of data currently assembled about 23DU241, refer to the LeeDecker et al (1979) report submitted to the Memphis District.

TABLE 7

## CULTURAL MATERIAL COLLECTED AT VERNON REAVES SITE (23DU168)\*

Eroded former pond area -- N end of proposed project area collected 5-18-77

## Prehistoric

- 2 shell tempered (Neeley's Ferry Plain) sherds
- 1 chert blade fragment, modified
- 4 unmodified chert flakes
- 2 angular chert fragments
- 3 burned clay fragments (prehistoric?)

## Historic

1840-1860s

- 1 handpainted whiteware sherd, red purple flower, green band on outer edge, motif similar to "gaudy dutch" (Lofstrom 1976)
- 1 sponge stick stamp whiteware sherd; sponge stick stamp blue flower, handpainted green leaves, green band around edge like above. Motif similar to "gaudy dutch" (Lofstrom 1976)
- 5 salt glaze stone ware sherds, grey glaze on tan to grey paste
- 1 salt glaze crock base fragment, grey glaze on tan paste
- 1 salt glaze jug neck fragment, grey glaze on tan paste
- 1 salt glaze (?) rim fragment, brown glaze on reddish tan paste
- 1 dark green glass bottle (base?) fragment

## Late 19th to early 20th century historic material

- 1 white ironstone sherd, similar to Meakin Printed Royal Arms Mark #2584 (post 1891 when WWD "England" added; sherd includes "GLAND") (Godden 1964:425)
- 1 White ironstone sherd, portion of T. Furnival and Sons Printed Royal Arms Mark #1649; (1878-1890, Godden 1964:263).
- 1 white ironstone tea cup handle
- 2 white ironstone rim fragments
- 15 white ironstone sherds
- 2 thin white ceramic sherds
- 1 stoneware sherd, red-brown metallic glaze on reddish-grey paste
- 1 stoneware sherd (base fragment?), brown glaze on tan paste, one surface unglazed
- 1 green glaze churning jar fragment, marked "ov" (Nov.?)
- 4 glass fragments, blue or clear
- 1 base fragment, iron cooking vessel; rim of base fit into iron wood stove
- 1 base fragment of iron cooking vessel
- 1 triangular iron fragment, (farm machinery?)
- 1 brick fragment -- heat glazed
- 3 brick fragments red or orange

\*From Harris (1977:34-35)

## TABLE 7 concluded

Northeast portion of site, northeast of eroded area collected 5-18-77

Prehistoric

- 4 unmodified chert flakes
- 1 angular chert fragment, with cortex

Historic

- 1 white ironstone sherd
- 1 brick fragment

Eroded area south of field road Collected 5-18-77

- 1 chert biface thinning flake, unmodified
- 1 chert flake, modified
- 13 chert flakes, unmodified, several heat treated
- 2 angular chert fragments
- 7 chert decortication flakes
- 1 quartzite flake
- 1 sand tempered (Berres) sherd
- 1 shell tempered (Neeley's Ferry Plain) sherd

Historic

- 1 stoneware sherd, grey glaze on grey paste

Eroded area South of field road (same as above) Collected 5-18-77

- 7 chert flakes, or flake fragments
- 1 decortication flake

Historic

- 1 ironstone (?) sherd, paste only

23DU243 was originally recorded by Iroquois in 1978 (LeeDecker et al 1979:92-93) and was tested and assessed by Historic Preservation Associates in 1981 (Klinger et al 1981). Soil cores, shovel tests and two 1 m x 1 m excavation units were established. Klinger et al (1981:137) summarized the current data from 23DU243 as follows:

23DU243 is a small (ca. 1,000 m<sup>2</sup>) prehistoric archeological site with two intact and stratigraphically distinct cultural levels extending to a depth of over one meter. Natural preservation conditions at the site are uncertain (only one bone fragment was observed), but one clearly recognizable feature was present. 23DU243 is interpreted as representing a workshop site with only scant evidence of other types of occupation activities taking place. The lithic assemblage may provide useful information on the presence of specialized tool kits. Based on the investigations carried out at the site, the site area was utilized during the late Archaic, Woodland and Mississippian periods.

Although argued significant, no further work was recommended at 23DU243 because the proposed construction program could be undertaken without adversely impacting the archeological deposits (Klinger et al 1981:183-184).

While the HPA work was being conducted at 23DU243 a low rise to the east was investigated as a possible site location. Later identified as 23DU263, the site produced evidence of prehistoric habitation activities with both pottery and lithics being recovered from the surface. Located well outside of the project right-of-way, no subsurface investigations were conducted.

#### REVIEW OF THE ASM DATA

Records for 23DU168, 23DU241, 23DU243 and 23DU263 on file with the Department of Natural Resources (see above) are also in the Archaeological Survey of Missouri records (Table 8). The previously recorded sites of 23DU63, 23DU65, 23DU66, 23DU68, 23DU71, 23DU72 and 23DU75 all represent prehistoric activities. Each is small in surface distribution and none are clearly within the project direct impact zone.

Only 23DU242 is within the proposed corridor. Recorded by Iroquois in 1978, 23DU242 was described as follows (LeeDecker et al 1979:92):

This historic site was located during a surface walkover survey. It is situated approximately 25 meters from Ditch 19 and an old farm road roughly bisects the site area. The site consists of a scatter of red brick, glass, and ceramics. There was no evidence of a foundation, but the 1956 topographic map indicates a structure and a farm road at this site. The observed artifacts are probably the remains from that structure.

TABLE 8

Search of Archaeological Survey of Missouri Records  
(As of 7 February 1983)

| PROJECT<br>NAME | TOWNSHIP | RANGE | SECTION | RESULTS                        |
|-----------------|----------|-------|---------|--------------------------------|
| Ditch 19        | 24N      | 10E   | 29/30   |                                |
| Extension       | 24N      | 10E   | 31/32   |                                |
|                 | 23N      | 10E   | 5/6     |                                |
|                 | 23N      | 10E   | 7/8     |                                |
|                 | 23N      | 10E   | 18      |                                |
|                 | 23N      | 10E   | 19      | 23DU65, 23DU66                 |
|                 | 23N      | 9E    | 24      |                                |
|                 | 23N      | 9E    | 25      |                                |
|                 | 23N      | 9E    | 36      | 23DU63                         |
|                 | 22N      | 9E    | 1       | 23DU75                         |
|                 | 22N      | 9E    | 12      | 23DU71, 23DU72, <u>23DU241</u> |
|                 | 22N      | 9E    | 13      | 23DU68, <u>23DU242</u>         |
|                 | 22N      | 10E   | 18      | 23DU243, 23DU263               |
| Ditch 14        | 22N      | 10E   | 18      | 23DU243, 23DU263               |
|                 | 22N      | 10E   | 17      | <u>23DU168</u>                 |
|                 | 22N      | 10E   | 9       |                                |
|                 | 22N      | 10E   | 4       |                                |
| Lateral A       | 23N      | 9E    | 11/12   |                                |
|                 | 23N      | 9E    | 13/14   |                                |
|                 | 23N      | 9E    | 23/24   |                                |
|                 | 23N      | 9E    | 25/26   |                                |
|                 | 23N      | 9E    | 35/36   | 23DU63                         |
| Lateral 1       | 22N      | 9E    | 12      |                                |
|                 | 22N      | 10E   | 7       |                                |
|                 | 22N      | 10E   | 6       |                                |

Site Number = Historic and prehistoric occupations

# NATURE OF CULTURAL RESOURCES WITHIN THE PROPOSED CORRIDORS

From our review of existing literature, unpublished extant data and manuscripts and from our general knowledge of the nature of the cultural resources which occur in the region, we have developed a series of predictive statements which focus specifically on the project area. Future field investigation should be aimed at refining, discarding or supporting these hypotheses.

1. Small specialized activity-extractive sites exist within the proposed project corridors
2. Recent historic dumping sites (post A.D. 1920) will be the predominant site type observed in all segments of the project corridor.
3. Modern agricultural practices (e.g., clearing, land leveling and intensive cultivation) have damaged and/or destroyed cultural resources present.
4. Based on general experience, unscientific collecting from recorded prehistoric sites has occurred within the project area.
5. Based on the 7 February 1983 records check by the Archaeological Survey of Missouri a small number of prehistoric archeological sites are currently on record on the edge or adjacent to the project corridor.
6. The presence or absence of certain landforms within the project corridors increases/decreases the likelihood of locating cultural resources:
  - a. The presence of natural levee soils along portions of each project segment increases the probability of sites.
  - b. The absence of higher landforms in other parts of the project area decreases the likelihood of locating cultural resources.
7. The areas along project segments characterized by higher elevations and parts of natural levee systems have a high probability of containing prehistoric and historic cultural resources:
  - a. Sites which do occur in these area will reflect short term specialized activities, as well as more permanent occupations.
  - b. Some sites found in these areas may also contain intact subsurface remains as well as plowzone deposits.

8. Based on a 28 January 1983 records check of the Missouri Department of Natural Resources records, it is unlikely that any historic sites of architectural or historic significance will be located within the project corridor.

9. Based on our review of the relevant USGS quadrangle, there are several historic building sites within the project corridor:

a. Many of these building sites will still be standing or in use.

b. Many of these building sites will have been dismantled or otherwise destroyed, leaving only archeological and archival evidence for their existence.

c. Few, if any, of these historic resources will have National Register significance.

10. Most of the archeological sites recorded during future field surveys will be small, shallow, plowzone lithic scatters with few or no diagnostic artifacts.

11. Sites which may be present representing the Woodland Period will exhibit pottery of the Barnes (sand-tempered) tradition rather than of the Baytown (grog-tempered) tradition.

12. Several previously recorded sites have both prehistoric and historic cultural affiliations and it is likely that other sites with these components will be located within the project limits.

13. Lithic cultural materials have been recovered and/or observed at all previously recorded sites within the project limits and it is very probable that lithic materials will predominate the cultural assemblages recovered at any newly discovered prehistoric sites.



# REFERENCES CITED

Call, R. Ellsworth

- 1891 Vol. II The Geology of Crowley's Ridge. In Annual Report of the Geological Survey of Arkansas for 1889. Woodruff Printing Co. Little Rock, Arkansas.

Fehon, Jacqueline R.

- 1976 Environmental setting. In The Cache River Archeological Project: an experiment in contract archeology, assembled by Michael B. Schiffer and John H. House. Arkansas Archeological Survey Research Series 8:17-28. Fayetteville.

Ferguson, Dick V.

- 1979 Soil Survey of Craighead County, Arkansas. U.S.D.A. Soil Conservation Service in cooperation with the Arkansas Agricultural Experiment Station. Washington, D.C.

Fisk, Harold N.

- 1944 Geological investigation of the alluvial valley of the Lower Mississippi River. Mississippi River Commission Publication 52. War Department, U. S. Army Corps of Engineers.

Gurley, Phill D.

- 1979 Soil survey of Dunklin County, Missouri. U.S. Department of Agriculture, Soil Conservation Service in cooperation with the Missouri Agricultural Experiment Station, Washington, D.C.

Harris, Suzanne E.

- 1977 Survey for archaeological, architectural, and historic resources along Ditch 19, item 1, parcel 1, Dunklin County, Missouri. American Archaeology Division, Department of Anthropology, University of Missouri, Columbia.

House, John H.

- 1975 Records check and summary of prior archeological knowledge. In The Cache River Archeological Project: an experiment in contract archeology, assembled by Michael B. Schiffer and John H. House. Arkansas Archeological Survey Research Series 8:29-36. Fayetteville.

Jurney, David H., Jr.

- 1978 A brief outline of regional history. In St. Francis II: an archeological assessment of three COE-sponsored channelization projects in the St. Francis Basin, Arkansas, assembled by Timothy C. Klinger and Mark A. Mathis. Arkansas Archeological Survey Research Report 14:21-26. Fayetteville.

Klinger, Timothy C.

- 1978 Lowland environmental variability and prehistoric settlement behavior in the Lower Mississippi Valley. Midcontinental Journal of Archaeology 3(2):285-331.

Klinger, Timothy C., Carol S. Spears, Ross A. Dinwiddie, Michael C. Sierzchula, Cynthia R. Price, James E. Price.

- 1981 Cultural Resources Survey and Testing in the Bootheel Region of Missouri. Report submitted to the Department of the Army, Memphis District, Corps of Engineers, in accordance with Contract No. DACW66-81-C-0032. Historic Preservation Associates Reports 81-3. Fayetteville.

LeeDecker, Charles H., A. Jordan Bell, James E. Bennet, Keith E. Bott, Cecil R. Brooks, Sherry G. Brown, Michael B. Dougan, Kenneth P. Fine, Edward W. Jess, W. Mark McCallum, Jimmy D. McNeil, Nanette Moore, Phyllis A. Morse, Teresa E. Ossim, Michael B. Pierce, Barbara J. Rydalch, James R. Schoen, Jr., Linda B. Schrader, Peter D. Skirbunt, Carolyn A. Smith, Wesley R. Stinson, Sally Kress Tompkins and Joey A. White

- 1979 A Survey Level Report of the Ditch 19 Channel Enlargement Project Item 1, Parcel 2 and Item 2, Dunklin County, Missouri. Report submitted to U.S. Army Corps of Engineers, Memphis District, in accordance with Contract No. DACW66-78-C-0054, Work Order Component No. II-19. Iroquois Research Institute, Fairfax, Virginia.

McGimsey, Charles R. III and Hester A. Davis (editors)

- 1977 The management of archeological resources: The Airlie House Report. Special Publication, Society for American Archeology.

Missouri Office of Historic Preservation

- 1978 Guidelines for contract cultural resource survey reports and professional qualifications. Department of Natural Resources, Historic Preservation Program. Jefferson City, Missouri.

Morse, Dan F.

- 1969 Introducing northeast Arkansas prehistory. The Arkansas Archeologist 10:12-28. Fayetteville.
- 1980 Archeology in the northern Mississippi Alluvial Valley. In Zebree archeological project: excavation, data interpretation, and report on the Zebree homestead site, Mississippi County, Arkansas, edited by Dan F. Morse and Phyllis A. Morse, pp. 1-1--1-24. Report submitted to the Memphis District, U.S. Army Corps of Engineers by the Arkansas Archeological Survey. Fayetteville.

Morse, Phyllis A.

- 1980 The forgotten pioneers. In Zebree archeological project: excavation, data interpretation, and report on the Zebree homestead site, Mississippi County, Arkansas, edited by Dan F. Morse and Phyllis A. Morse, pp. 1-1--1-24. Report submitted to the Memphis District, U.S. Army Corps of Engineers by the Arkansas Archeological Survey. Fayetteville.

Padgett, Thomas J. and John H. and House

- 1977 Archeological and historical background. In Poinsett Watershed: contract archeology on Crowley's Ridge. Arkansas Archeological Survey Research Report 10:9-10. Fayetteville.

Phillips, Philip

- 1970 Archaeological survey in the Lower Yazoo Basin, Mississippi, 1949-1955. Papers of the Peabody Museum of Archaeology and Ethnology, Harvard University 60. Cambridge.

Phillips, Philip, James A. Ford, and James B. Griffin

- 1951 Archaeological survey in the Lower Mississippi Alluvial Valley, 1940-1947. Papers of the Peabody Museum of American Archaeology and Ethnology, Harvard University 25. Cambridge.

Price, Cynthia R.

- 1980 Analysis of historic period materials and assessment of site function. In Changing settlement systems in the Fourche Creek watershed in the Ozark Border region of southeast Missouri and northeast Arkansas, edited by James E. Price and Cynthia R. Price. Draft report submitted to the U.S. Department of Agriculture, Soil Conservation Service by the Center for Archeological Research, Southwest Missouri State University. Springfield.

Price, James E., Lynn D. Morrow and Cynthia R. Price

- 1978 A preliminary literature review of the prehistoric and historic cultural resources for the M & A Power Corporation power line transect in New Madrid, Dunklin and Pemiscot Counties, Missouri, and Mississippi County, Arkansas: 1978. Center for Archeological Research, Southwest Missouri State University. Springfield.

Price, James E., Cynthia R. Price, J. Cottier, S. Harris and J. House

- 1975 An assessment of the cultural resources of the Little Black watershed. University of Missouri. Columbia

Price, James E., Cynthia R. Price and Suzanne E. Harris

- 1976 An assessment of the cultural resources of the Fourche Creek watershed. Submitted to and on file with the U.S. Department of Agriculture, Soil Conservation Service. Jefferson City.

Price, James E., Cynthia R. Price, Suzanne E. Harris, David M. Quick,  
Roger T. Saucier and Juris Zarins (editors)

- 1980 Changing settlement systems in the Fourche Creek watershed  
in the Ozark Border region of southeast Missouri and northeast  
Arkansas. Draft report submitted to and on file with the  
U.S. Department of Agriculture, Soil Conservation Service,  
Jefferson City.

Roberts, Bobby L.

- 1976 A review and summary of historic European and American  
activities in the Village Creek Basin. In Village Creek:  
an explicitly regional approach to the study of cultural  
resources, assembled by Timothy C. Klinger. Draft report  
on file with the Arkansas Archeological Survey and Soil  
Conservation Service. Little Rock.

Saucier, Roger T.

- 1974 Quaternary geology of the Lower Mississippi Valley. Arkansas  
Archeological Survey Research Series 6. Fayetteville.

Shelford, Victor E.

- 1963 The ecology of North America. University of Illinois Press.  
Urbana.

Sweet, A. T., Floyd S. Bucher, H.H. Krusekopf, H.G. Lewis, J.E. Dunn,  
E.C. Hall and L.V. Davis

- 1912 Soil Survey of Stoddard County, Missouri. U.S. Department  
of Agriculture, Bureau of Soils.

Willey, Gordon R.

- 1966 An introduction to American archaeology 1. North and Middle  
America. Prentice-Hall. Englewood Cliffs, N.J.

Williams, J. Raymond

- 1974 The Baytown phases in the Cairo lowland of southeast Missouri.  
The Missouri Archaeologist 36.

Williams, Stephen

- 1954 An archaeological study of the Mississippian culture in  
southeast Missouri. PhD dissertation, Department of Anthro-  
pology, Yale University. University Microfilms. Ann Arbor.

APPENDIXES

|   |    |   |
|---|----|---|
| Project Scope of Work   | 31 | . |
| Records Check Document from the Missouri Archaeological<br>Survey dated 7 February 1983 | 37 | . |
| Project Participants  | 39 |   |

SECTION C - DESCRIPTION/SPECIFICATIONS

SCOPE OF WORK

Cultural Resource Literature Search of the Ditch 14, Lateral A, Lateral 1, and the Extended Reach of Ditch 15, Dunklin and Stoddard Counties, Missouri

C-1. GENERAL.

C-1.1. The Contractor shall conduct a background and literature search of the L'Anguille River, Second Creek, First Creek, and Brushy Creek within Woodruff, Poinsett, Cross, Lee, and St. Francis Counties, Arkansas (See paragraph 2). These tasks are in partial fulfillment of the Memphis District's obligations under the National Historic Preservation Act of 1966 (P.L. 89-665); the National Environment Policy Act of 1969 (P.L. 91-190); Executive Order 11593, "Protection and Enhancement of Cultural Environment," 13 May 1971 (36 F.R. 3921); Preservation of Historic and Archaeological Data, 1974 (P.L. 93-291); and the Advisory Council on Historic Preservation, "Procedures for the Protection of Historic and Cultural Properties" (36 CFR VIII Part 800).

C-1.2. Personnel Standards.

a. The Contractor shall utilize a systematic, interdisciplinary approach to conducting the study. Specialized knowledge and skills will be used during the course of the study to include expertise in archaeology, history, architecture, geology and other disciplines as required. Techniques and methodologies used for the study shall be representative of the state of current professional knowledge and development.

b. The following minimal experiential and academic standards shall apply to personnel involved in cultural resources investigations described in this Scope of Work:

(1) Archaeological Project Directors or Principal Investigators (PI). Persons in charge of an archaeological project or research investigation contract, in addition to meeting the appropriate standards for archaeologist, must have a publication record that demonstrates extensive experience in field project formulation, execution and technical monograph reporting. Suitable professional references may also be made available to obtain estimates regarding the adequacy of prior work. If prior projects were of a sort not ordinarily resulting in a publishable report, a narrative should be included detailing the proposed project director's previous experience along with references suitable to obtain opinions regarding the adequacy of this earlier work.

(2) Archaeologist. The minimum formal qualifications for individuals practicing archaeology as a profession are a B.A. or B. Sc. degree from an accredited college or university, followed by 2 years of graduate study with concentration in anthropology and specialization in archaeology and at least

two summer field schools or their equivalent under the supervision of archaeologists of recognized competence. A Master's thesis or its equivalent in research and publication is highly recommended, as is the M.A. degree.

(3) Other Professional Personnel. All non-archaeological personnel utilized for their special knowledge and expertise must have a B.A. or B.Sc. degree from an accredited college or university, followed by a minimum of one year of successful graduate study with concentration in appropriate study.

(4) Other Supervisory Personnel. Persons in any archaeological supervisory position must hold a B.A., B.S. or M.A. degree with a concentration in archaeology and a minimum of 2 years of field and laboratory experience.

(5) Crew Members and Lab Workers. All crew members and lab workers must have prior experience compatible with the tasks to be performed under this purchase order. An academic background in archaeology/anthropology is highly recommended.

c. All operations shall be conducted under the supervision of qualified professionals in the discipline appropriate to the data that is to be discovered, described or analyzed. Vitae of personnel involved in project activities may be required by the Contracting Officer at anytime during the period of service of this purchase order.

C-1.3. The Contractor shall designate in writing the name of the Principal Investigator. In the event of controversy or court challenge, the Principal Investigator shall testify with respect to report findings.

C-1.4. The Contractor shall keep standard records which may be reviewed by the Contracting Officer. These records shall include field notes, site survey forms and any other cultural resource forms and/or records field notes and photographs necessary to successfully implement requirements of this Scope of Work.

C-1.5. To conduct the field investigation, the Contractor will obtain all necessary permits, licenses, and approvals from all local, state and Federal authorities. Should it become necessary in the performance of the work and services of the Contractor to secure the right of ingress and egress to perform any of the work required herein on properties not owned or controlled by the Government, the Contractor shall secure the consent of the owner, his representative, or agent, prior to effecting entry on such property.

C-1.6. Innovative approaches to data location, collection, description and analysis, consistent with other provisions of this contract and the cultural resources requirements of the Government, are encouraged.

C-1.7. The Contractor shall furnish expert personnel to attend conferences and furnish testimony in any judicial proceedings involving the archaeological and historical study, evaluation, analysis and report. When required,

arrangements for these services and payment, therefore, will be made by representatives of either the U. S. Army Corps of Engineers or the Department of Justice.

C-1.8. The Contractor, prior to the acceptance of the final report, shall not release any sketch, photograph, report or other material of any nature obtained or prepared under this purchase order without specific written approval of the Contracting Officer.

C-1.9. The extent and character of the work to be accomplished by the Contractor shall be subject to the general supervision, direction, control and approval of the Contracting Officer. The Contracting Officer may have a representative of the Government present during any or all phases of the described cultural resource project.

#### C-2. STUDY AREA.

C-2.1. The Ditch 19 Extension, Ditch 14, Lateral A, and Lateral 1 project is located in Dunklin and Stoddard Counties, Missouri. The expected right-of-way will be 150 feet (45.72 meters) on both sides of the ditch centerline. The approximate length of each reach is as follows: Ditch 19 Extension, 11.5 miles; Ditch 14, 5.5 miles; Lateral A, 5 miles; and Lateral 1, 1.5 miles. The attached map shows each reach. The survey areas are on the Malden, MO, and Valley Ridge, MO, 15 minute quadrangle maps.

#### C-3. DEFINITIONS.

C-3.1. "Cultural resources" are defined to include any buildings, site, district, structure, object, data, or other material relating to the history, architecture, archeology, or culture of an area.

C-3.2. "Background and Literature Search" is defined as a comprehensive examination of existing literature and records for the purpose of inferring the potential presence and character of cultural resources in the study area. The examination may also serve as collateral information to field data in evaluating the eligibility of cultural resources for inclusion in the National Register of Historic Places or in designating losses of significant data in such resources.

C-3.3. "Intensive Survey" is defined as a comprehensive, systematic, and detailed on-the-ground survey of an area, of sufficient intensity to determine the number, types, extent and distribution of cultural resources present and their relationship to project features.

C-3.4. "Mitigation" is defined as the amelioration of losses of significant prehistoric, historic, or architectural resources which will be accomplished through prepared actions to avoid, preserve, protect, or minimize adverse effect upon such resources or to recover a representative sample of the data they contain by implementation of scientific research and other professional

techniques and procedures. Mitigation of losses of cultural resources include, but is not limited to, such measures as: (1) recovery and preservation of an adequate sample of archeological data to allow for analysis and published interpretation of the cultural and environmental conditions prevailing at the time(s) the area was utilized by man; (2) recording, through architectural quality photographs and/or measured drawings of buildings, structures, districts, sites and objects and deposition of such documentation in the Library of Congress as a part of the National Architectural and Engineering Record; (3) relocation of buildings, structures and objects; (4) modification of plans or authorized projects to provide for preservation of resources in place; (5) reduction or elimination of impacts by engineering solutions to avoid mechanical effects of wave wash, scour, sedimentation and related processes and the effects of saturation.

C-3.5. "Reconnaissance" is defined as an on-the-ground examination of selected portions of the study area, and related analysis adequate to assess the general nature of resources in the overall study area and the probable impact on resources of alternate plans under consideration. Normally reconnaissance will involve the intensive examination of not more than 15 percent of the total proposed impact area.

C-3.6. "Significance" is attributable to those cultural resources of historical, architectural, or archeological value when such properties are included in or have been determined by the Secretary of the Interior to be eligible for inclusion in the National Register of Historic Places after evaluation against the criteria contained in How to Complete National Register Forms.

C-3.7. "Testing" is defined as the systematic removal of the scientific, prehistoric, historic, and/or archeological data that provide an archeological or architectural property with its research or data value. Testing may include controlled surface survey, shovel testing, profiling, and limited subsurface test excavations of the properties to be affected for purposes of research planning, the development of specific plans for research activities, preparation of notes and records, and other forms of physical removal of data and the material analysis of such data and material, preparation of reports on such data and material and dissemination of reports and other products of the research. Subsurface testing shall not proceed to the level of mitigation.

C-3.8. "Analysis" is the systematic examination of material data, environmental data, ethnographic data, written records, or other data which may be prerequisite to adequately evaluating those qualities of cultural loss which contribute to their significance.

#### C-4. GENERAL PERFORMANCE SPECIFICATIONS.

C-4.1. The Contractor shall prepare for each of the project areas a draft and final report detailing the results of the individual studies and subsequent recommendations.

#### C-4.2. Background and Literature Search.

a. This task shall include an examination of the historic and prehistoric environmental setting and cultural background of the study area and shall be of sufficient magnitude to achieve a detailed understanding of the overall cultural and environmental context of the study area.

b. Information and data for the literature search shall be obtained, as appropriate, from the following sources: (1) Scholarly reports - books, journals, theses, dissertations and unpublished papers; (2) Official Records - Federal, state, county and local levels, property deeds, public works and other regulatory department records and maps; (3) Libraries and Museums - both regional and local libraries, historical societies, universities, and museums; (4) Other repositories - such as private collections, papers, photographs, etc.; (5) Archeological site files at local universities, the State Historic Preservation Office, the State Archeologist; (6) Consultation with qualified professionals familiar with the cultural resources in the area, as well as consultation with professionals in associated areas such as history, sedimentology, geomorphology, agronomy, and ethnology.

c. The Contractor shall include as an appendix to the draft and final reports written evidence of all consultation and any subsequent response(s), including the dates of such consultation and communications.

d. The background and literature search shall be performed in such a manner as to facilitate predictive statements (to be included in the study report) concerning the probable quantity, character, and distribution of cultural resources within the project area. In addition, information obtained in the background and literature search should be of such scope and detail as to serve as an adequate data base for subsequent field work and analysis in the study area undertaken for the purpose of discerning the character, distribution and significance of identified cultural resources.

e. In order to accomplish the objectives described in paragraph 4.02.d., it will be necessary to attempt to establish a relationship between landforms and the patterns of their utilization by successive groups of human inhabitants. This task should involve defining and describing various zones of the study area with specific reference to such variables as past topography, potential food resources, soils, geology, and river channel history.

#### C-5. GENERAL REPORT REQUIREMENTS.

C-5.1. The primary purpose of the cultural resources report is to serve as a planning tool which aids the Government in meeting its obligations to preserve and protect our cultural heritage. The report will be in the form of a comprehensive, scholarly document that not only fulfills mandated legal requirements but also serves as a scientific reference for future cultural resources studies. As such, the report's content must be not only descriptive but also analytic in nature.

C-5.2. Upon completion of all research, the Contractor shall prepare reports detailing the work accomplished and the results.

C-5.3. The report shall include, but not necessarily be limited to, the following sections and items:

a. Title Page. The title page should provide the following information: the type of task undertaken, the cultural resources which were assessed (archeological, historical, architectural); the project name and location (county and state); the date of the report; the Contractor's name; the purchase order number; the name of the author(s) and/or the Principal Investigator; and the agency for which the report is being prepared.

b. Abstract. The abstract should include a summary of the number and types of resources which were surveyed, results of activities and the recommendations of the Principal Investigator.

#### c. Table of Contents.

d. Introduction. This section shall include the purpose of the report; a description of the proposed project; a map of the general area; a project map; and the dates during which the task was conducted. The introduction shall also contain the name of the institution where recovered materials will be curated.

e. Environmental Context. This section shall contain, but not be limited to, a discussion of probably past floral and faunal characteristics of the project area. Since data in this section may be used in the future evaluation of specific cultural resource significance, it is imperative that the quantity and quality of environmental data be sufficient to allow subsequent detailed analysis of the relationship between past cultural activities and environmental variables.

f. Previous Research. This section shall describe previous research which may be useful in deriving or interpreting relevant background research data, problem domains, or research questions and in providing a context in which to examine the probability of occurrence and significance of cultural resources in the study area.

g. Literature Search and Personal Interviews. This section shall contain the results of the literature search, including specific data sources, and personal interviews which were conducted during the course of investigations.

h. Conclusions and Recommendations. This section shall contain the recommendations of the Principal Investigator regarding all research activities. Conclusions derived from research concerning the nature, quantity and distribution of cultural resources should be used in describing the probable impact of project alternatives on cultural resources. Conclusions and recommendations should include an evaluation of predictive statements formulated on the basis of the background and literature search.



1. References (American Antiquity style).

J. Appendices (maps, correspondence, etc.). A copy of this Scope of Work shall be included as an appendix in all reports.

C-5.4. The above items do not necessarily have to be discrete sections; however, they should be readily discernable to the reader. The detail of the above items may vary somewhat with the purpose and nature of the study.

C-5.5. In order to prevent potential damage to cultural resources, no information shall appear in the body of the report which would reveal precise resource location. All maps which indicate or imply precise site locations shall be included in reports as a readily removable appendix (ex: envelope).

C-5.6. No logo or other such organizational designation shall appear in any part of the report (including tables or figures) other than the title page.

C-5.7. Unless otherwise specifically authorized by the Contracting Officer, all reports shall utilize permanent site numbers assigned by the state in which the study occurs.

C-5.8. All appropriate information (including typologies and other classificatory units) not generated in these contract activities shall be suitably referenced.

C-5.9. Information shall be presented in textual, tabular, and graphic forms, whichever are most appropriate, effective and advantageous to communicate necessary information. All tables, figures and maps appearing in the report shall be of publishable quality.

C-5.10. Any abbreviated phrases used in the text shall be spelled out when the phrase first occurs in the text. For example, use "State Historic Preservation Officer (SHPO)" in the initial reference and thereafter "SHPO" may be used.

C-5.11. The first time the common name of a biological species is used it should be followed by the scientific name.

C-5.12. In addition to street addresses or property names, sites shall be located on the Universal Transverse Mercator (UTM) grid.

C-5.13. All measurements should be metric. If the Contractor's equipment is in the English system, then the metric equivalents should follow in parentheses.

C-5.14. As appropriate, diagnostic and/or unique artifacts, cultural resources of their contexts shall be shown by drawings or photographs.

C-5.15. Black and white photographs are preferred except when color changes are important for understanding the data being presented. No instant type photographs may be used.

C-7

C-5.16. Negatives of all black and white photographs and/or color slides of all plates included in the final report shall be submitted.

C-6. SUBMITTALS.

C-6.1. The Contractor shall, unless delayed due to causes beyond his fault or negligence, complete all work and services under the purchase order within the following time limitations after receipt of notice to proceed.

a. Six (6) copies of the draft report will be submitted within 60 calendar days following receipt of notice to proceed.

b. The Contractor shall submit under separate cover, six copies of appropriate 15' quad-angle maps (7.5' when available) and other site drawings which show exact boundaries of all cultural resources within the project area and their relationship to project features, and single copies of all forms, records and photographs described in paragraph 1.04.

c. The Government shall review the draft report and provide comments to the Contractor within 30 calendar days after receipt of the draft report.

d. An original and 25 copies of the final report shall be submitted within 30 calendar days following the Contractor's receipt of the Government's comments on the draft report.

C-6.2. If the Government review exceeds 30 calendar days, the period of service of the purchase order shall be extended on a day-by-day basis equal to any additional time required by the Government for review.

a. All maps which indicate or imply actual site locations shall be included in reports as a readily removable appendix (ex: envelope). In order to prevent potential damage to cultural resources, no information shall appear in the body of the report which would suggest resource location.

b. No logo or other such organizational designation shall appear in any part of the report (including tables or figures) other than the title page.

C-6.3. At any time during the period of service of this purchase order, upon the written request of the Contracting Officer, the Contractor shall submit within 30 calendar days, any portion or all field records described in paragraph 1.04 without additional cost to the Government.

C-6.4. The Contractor shall prepare and submit with the final report, a site card for each identified resource or aggregate resource. These site cards shall not replace state approved prehistoric, historic, or archaeological forms or Contractor designed forms. This site card shall contain the following information, to the degrees permitted by the type of study authorized:

C-8

a. Site number

b. Site name

c. Location: section, township, and UTM coordinates (for procedures in determining UTM coordinates, refer to How to Complete National Register Forms, National Register Program, Volume 2.)

d. County and state

e. Quad maps

f. Date of record

g. Description of site

h. Condition of site

i. Test excavation results

j. Typical artifacts

k. Chronological position (if known)

l. Relation to project

m. Previous studies and present contract number

n. Additional remarks

The information shall be typed on 5 X 8 inch color coded cards. White cards shall be used for archeological sites, blue cards for historical sites, green cards for architectural sites and yellow cards for sites eligible for or placed on the National Register of Historic Places.

#### C-7. SCHEDULE.

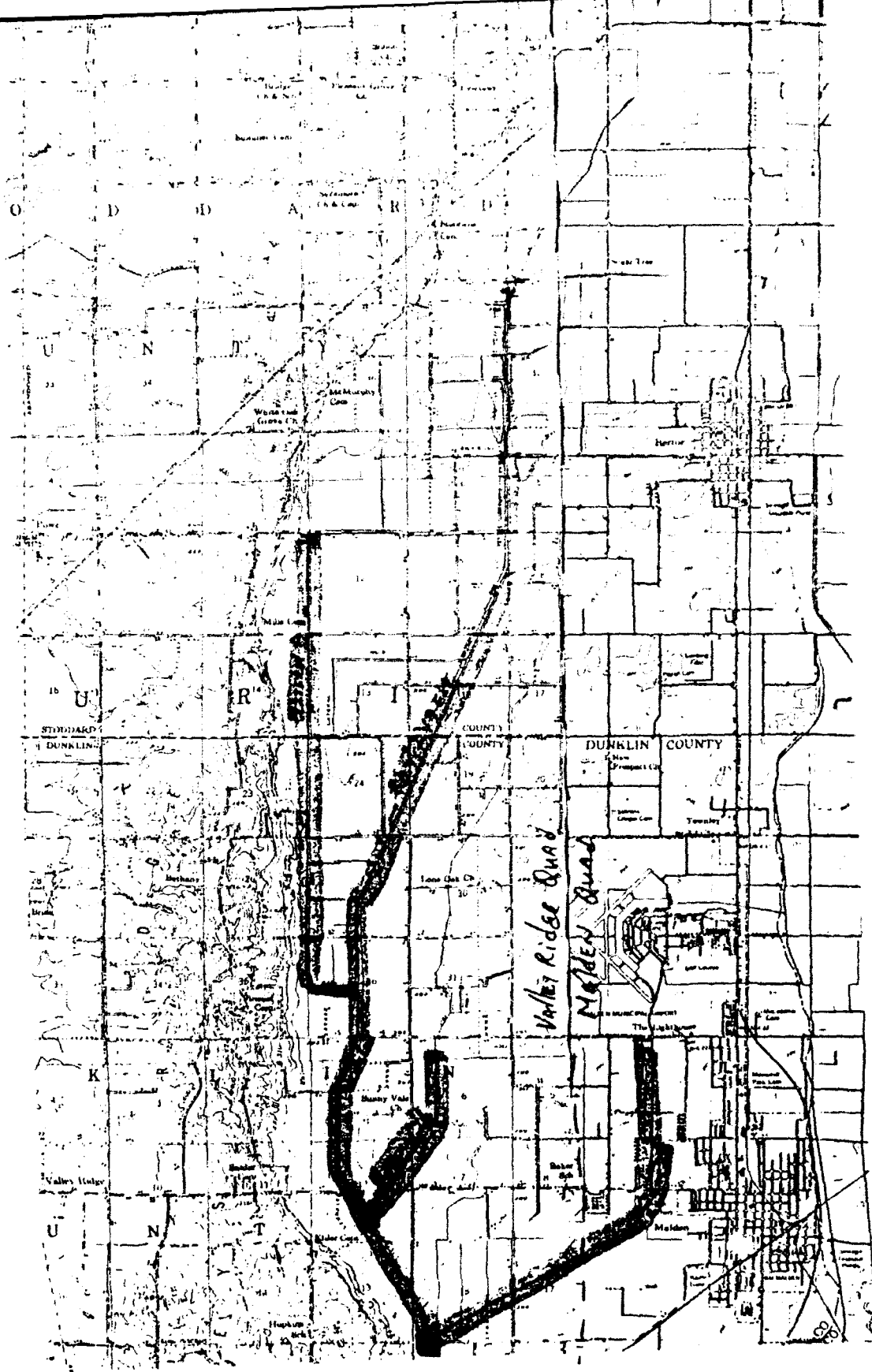
The Contractor shall, unless delayed due to causes beyond his control and without his fault or negligence, complete all work and services under this purchase order within 90 days after receipt of notice to proceed.

#### C-8. METHOD OF PAYMENT.

C-8.1. Upon satisfactory completion of work by the Contractor, in accordance with the provisions of this purchase order, and its acceptance by the Contracting Officer, the Contractor will be paid the amount of money indicated in Block 25 of the purchase order.

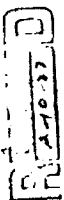
C-8.2. If the Contractor's work is found to be unsatisfactory and if it is determined that fault or negligence on the part of the Contractor or his employees has caused the unsatisfactory condition, the Contractor will be liable for all costs in connection with correcting the unsatisfactory work. The work may be performed by Government forces or Contractor forces at the direction of the Contracting Officer. In any event, the Contractor will be held responsible for all costs required for correction of the unsatisfactory work, including payments for services, motive expenses, equipment rental, supervision, and any other costs in connection therewith, where such unsatisfactory work as deemed by the Contracting Officer to be the result of carelessness, incompetent performance or negligence by the Contractor's employees. The Contractor will not be held liable for any work or type of work not covered by this purchase order.

C-8.3. Prior to settlement upon termination of the purchase order, and as a condition precedent thereto, the Contractor shall execute and deliver to the Contracting Officer a release of all claims against the Government arising under or by virtue of the purchase order, other than such claims, if any, as may be specifically excepted by the Contractor from the operation of the release in stated amounts to be set forth therein.





UNIVERSITY OF MISSOURI-COLUMBIA



College of Arts and Science

Department of Anthropology  
American Archaeology  
Archaeological Survey of Missouri  
15 Suttler Hall  
Columbia, Missouri 65211  
Telephone (314) 882-3544

7 February 1983

Timothy C. Klinger  
Historic Preservation Associates  
P.O. Box 1064  
Payetteville, AR 72702

Dear Mr. Klinger:

This will acknowledge receipt and processing of your recent request for information from the Archaeological Survey of Missouri files. We have noted the specific area for which you wish to know if any resources are recorded in the ASM data center, have searched the computer files to determine if any resources are recorded for the coordinates you submitted, and have examined any site records in process as of the date of this letter. Attached you will find information related to your request.

In areas where sites have been reported, as well as where sites have not been reported, it is obvious that other resources may be present. There is no evidence that the available information is complete nor exhaustive of what may be available with an in-the-field search.

Further information on reported sites may be examined at the Archaeological Survey office following the specific guidelines of the Archaeological Survey. If you find sites, or any further information on the nature of previously recorded sites, please send us the information for numbering and inclusion in the Survey files. Also, please consider that site locations are sensitive and you should take every precaution to protect the integrity of the locations to help avoid unnecessary site destruction and vandalism.

If we can be of any further help to you, please don't hesitate to call on us.

Sincerely yours,  
  
David E. Griffin  
Coordinator  
Archaeological Survey of Missouri

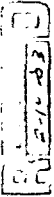
ENC

STANDARD FORM NO. 64



| Site no. | Location | County  |
|----------|----------|---------|
| 23DU63   | 23N 9E   | Dunklin |
| 23DU65   | 23N 10E  | Dunklin |
| 23DU66   | 23N 10E  | Dunklin |
| 23DU68   | 22N 9E   | Dunklin |
| 23DU71   | 22N 9E   | Dunklin |
| 23DU72   | 22N 9E   | Dunklin |
| 23DU75   | 22N 9E   | Dunklin |
| 23DU168  | 22N 10E  | Dunklin |
| 23DU241  | 22N 9E   | Dunklin |
| 23DU242  | 22N 9E   | Dunklin |
| 23DU243  | 22N 10E  | Dunklin |
| 23DU263  | 22N 10E  | Dunklin |

Historic  
Historic



ARCHAEOLOGICAL SURVEY OF MISSOURI

I hereby declare that I personally meet the criteria established by the Missouri Historic Preservation Program for conduction Cultural Resource Management projects, or that the agency I represent meets those criteria, and as such petition for access to the files of the Archaeological Survey of Missouri in accordance with guidelines set forth in the letter of Michael J. O'Brien, Director of American Archaeology of the University of Missouri and Secretary of the Missouri Archaeological Society, dated July 22, 1981. I accept responsibility for charges for use of the survey at rates described in that letter and specifically as listed below. I furthermore understand that the files, information and other material of the Archaeological Survey of Missouri to which I have access in response to this petition are confidential. I will not copy or duplicate, nor allow copies or duplicates to be made of any of those files, information or material except as is necessary for inclusion in any report utilizing this material. I commit myself to provide a copy of any documents, study or report produced which uses or is related to the data provided under this petition.

32 January 1983  
Date

FEEs

Opening fee \_\_\_\_\_  
Use fee 2 hours \_\_\_\_\_  
@ \$10 per hour \_\_\_\_\_  
Other charges (at cost) \_\_\_\_\_  
Telephone \_\_\_\_\_  
Computer Time \_\_\_\_\_  
Copying \_\_\_\_\_  
Mailing \_\_\_\_\_  
Other \_\_\_\_\_  
Consultant \_\_\_\_\_ hours \_\_\_\_\_  
@ \$20 per hour \_\_\_\_\_  
TOTAL \_\_\_\_\_

Timothy Flanagan  
Printed Name

Historic Preservation Associates  
Organization - Institution

Archaeologist  
Position

Dunklin and Stoddard counties

Approved:

Michael J. O'Brien  
Director of American Archaeology

NOTE: Prepare in duplicate. A copy of this petition with charges entered will be provided you as a statement for payment of this account.

## PROJECT PARTICIPANTS

JEEP HELM conducted the full search of the Missouri Department of Natural Resources files for HPA on 28 January 1983. Mr. Helm is a Research Associate with the Center for Archaeological Research, Southwest Missouri State University, Springfield.

STEVEN M. IMHOFF assisted in report preparation. He received an M.A. degree in anthropology from the University of Arkansas in 1982.

SCOTT A. JONES assisted in the preparation of the project report. Mr. Jones received a B.A. degree in anthropology from the University of Arkansas in 1982.

TIMOTHY C. KLINGER served as the Principal Investigator for the project and authored various sections of the report. Mr. Klinger received an M.A. degree in anthropology in 1977 from the University of Arkansas and a J.D. from the University of Arkansas School of Law in 1982.

Parts of this manuscript were originally included in Cultural Resources Survey and Testing in the Bootheel Region of Missouri (Historic Preservation Associates Reports 81-3) and many of the authors deserve credit for their previous work including Carol S. Spears, Ross A. Dinwiddie, Michael C. Sierzchula, Cynthia R. Price and James E. Price.